



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,679	08/16/2006	Hiroto Horikawa	129109	7034
25944 7590 09/02/2010 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER				
ASFAW, MESFIN T				
ART UNIT		PAPER NUMBER		
2882				
NOTIFICATION DATE		DELIVERY MODE		
09/02/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction25944@oliff.com  
jarnstrong@oliff.com

### Office Action Summary

**Application No.**

10/589,679

**Applicant(s)**

HORIKAWA, HIROTO

**Examiner**

Mesfin T. Asfaw

**Art Unit**

2882

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42 and 44 is/are allowed.
- 6) ☒ Claim(s) 21, 22, 31, 32, 34, 35, 38-40, 43 and 45 is/are rejected.
- 7) ☒ Claim(s) 23-30, 33, 36, 37 and 41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/24/2009, 08/06/2010
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/27/2010 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 21-22, 31-32, 34-35, 38-40, 43, and 45, are rejected under 35 U.S.C. 102(e) as being anticipated by Shibazaki [US 20070127006 A1].

**As per Claim 21, and 35**, Shibazaki teaches a liquid immersion exposure apparatus (See fig. 1) that includes an exposure station and a measuring station and exposes a substrate via a liquid at the exposure station, comprising:

A plurality of movable members (WST1, WST2) each of which holds a substrate (W1, W2) and is movable between the exposure station and the measuring station;

An optical member PL disposed at the exposure station which irradiates an exposure beam to the substrate held by a first one of the movable members at the exposure station; and

a measurement device ALG2 positioned at the measuring station, which measures a second one of the movable members or a substrate held by the second movable member at the measuring station (Para 25),

Wherein a liquid is partially disposed on the second movable member or on the substrate held by the second movable member (See fig. 10).

**As per Claims 22, and 38**, Shibazaki teaches wherein the measurement at the measuring station is performed during the exposure at the exposure station (Para 23).

**As per Claims 31, and 39**, Shibazaki teaches a part of each of a plurality of movable members that contacts with a liquid is provided with liquid repellency treatment (Para 262).

**As per Claims 32, and 40**, Shibazaki teaches each of a plurality of movable members has a surface that is substantially flush with the surface of the substrate held by the movable member around the circumference of the substrate (See fig. 1).

**As per Claim 34**, Shibazaki teaches the substrate on the first movable member that was measured at the measuring station is exposed at the exposure station (Abstract).

**As per Claim 43, and 45,** Shibazaki teaches the method as claimed, because under the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claims, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process. See *In re King*, 801 F.2d 1324,231 MPEP 2112.02".

4. Claims 35, and 38, are rejected under 35 U.S.C. 102(e) as being anticipated by Nijmeijer et al. [US 20040189964 A1, hereafter Nijmeijer].

**As per Claim 35,** Nijmeijer teaches an exposure method utilizing a liquid immersion exposure apparatus that includes an exposure station and a measuring station and exposes a substrate via a liquid at the exposure station (See fig. 1), the method comprising:

Holding a substrate W by a plurality of movable members respectively, each of the plurality of movable members is movable between the exposure station and the measuring station (Para 64);

Irradiating an exposure beam to the substrate held by a first one of the movable members of the plurality of movable members at the exposure station; and

measuring a second one of the movable members or a substrate held by the second movable member at the measuring station, wherein a liquid is partially disposed on the second movable member or on the substrate (Para 14, where the liquid is

provided on the substrate at the exposure station and the above limitation did not differentiate which of the two substrates is that the liquid is disposed on).

**As per Claim 38**, Shibazaki teaches the measurement at the measuring station is performed during the exposure at the exposure station (Para 64).

#### ***Allowable Subject Matter***

5. Claims 23-30, 33, 36-37, and 41, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claims 42, and 44, are allowed.

#### ***Response to Arguments***

7. Applicant's arguments with respect to claims 21, and 35, have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mesfin T. Asfaw whose telephone number is 571-270-5247. The examiner can normally be reached on Monday to Friday, 7:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mesfin T Asfaw/  
Examiner, Art Unit 2882

/Alan A. Mathews/  
Primary Examiner, Art Unit 2882